Twelfth list of new mineral names.[1]

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Achromaite. F. Kretschmer, 1918. Jahrb. Geol. Reichsanstalt, Wien, vol. 67 (for 1917), p. 115 (Achromait). A variety of hornblende, perfectly colourless in micro-sections, forming a constituent of weigelite (hornblende-peridotite) from Weigelsberg, Moravia. Named from ἀχρώματος, colourless.

Alkali-beryl. S. L. Penfield, 1884. Amer. Journ. Sci., ser 3, vol. 28, p. 25 ('alkalies in beryl'). A. Lacroix, Bull. Soc. Franç. Min., 1908, vol. 31, p. 236 ('Béryl riche en alcalis'). Certain beryls contain appreciable amounts of alkalis: Li_2O up to 2·00 %, Na_2O 4·22 %, K_2O 2·25 %, Cs_2O 4·56 %, Rb_2O 1·34 %. *See* Caesium-beryl. [M.A. **1**–76, 446; **3**–448; **4**–138, 315.]

Alkali-hastingsite, Alkali-ferrohastingsite, Alkali-femaghastingsite. M. Billings, 1928. *See* Ferrohastingsite.

Allodelphite. P. Quensel and H. von Eckermann, 1931. Geol. För. Förh. Stockholm, vol. 52 (for 1930), p. 639 (Allodelphite). Hydrous silico-arsenite of manganese, $5MnO.2Mn_2O_3.As_2O_3.SiO_2.5H_2O$ or $MnO.(Mn_2,As_2,MnSi)O_3.H_2O$, as red-brown crystals, probably orthorhombic, from Långban, Sweden. Named from ἄλλος, other, and ἀδελφός, brother, on account of its relationship to synadelphite. [M.A. **4**–496.]

Almashite. G. Murgoci, 1924. Les ambres roumains, Correspondance économique roumaine, Bulletin officiel, Ministère de l'Industrie et du Commerce, Bucarest, 1924, vol. 6, no. 6, pp. 10, 16. A. P.

[1] Previous lists of this series have been given at the ends of vols. 11–21 (1897–1928) of this Magazine. The 1,506 names in the first ten lists are included in one alphabetical arrangement in the General Index (1926) to vols. 11–20 (1895–1925). References to 'Mineralogical Abstracts' are given in the form [M.A. 4–496].

Iancoulesco, Les richesses minières de la nouvelle Roumanie, Paris, 1928, p. 229. C. Doelter, Handbuch d. Mineralchemie, 1931, vol. 4, pt. 3, p. 935 (Almaschit). Green (almashite I) and black (almashite II) varieties of amber, differing from romanite, from the Almaș (Almash) valley near Piatra in Moldavia. The green variety contains C 82·15, H 10·94, O 2·57, S 0·33, ash 3·51, and the black C 79·45, H 10·23, O 3·00, S 1·40, ash 5·52. Named from the locality. [M.A. **4**–297.]

Ameletite. P. Marshall, 1929. Min. Mag., vol. 22, p. 174. Silicate with chloride of aluminium and sodium, approximate formula $9Na_2O.6Al_2O_3.12SiO_2.\frac{1}{2}NaCl$, as minute hexagonal crystals in phonolite from Dunedin, New Zealand. Named from ἀμελής, neglected, because the mineral had long been unrecognized.

Ammonioborite. W. T. Schaller, 1931. Amer. Min., vol. 16, p. 114. Hydrous borate of ammonium, $(NH_4)_2O.5B_2O_3.5H_2O$, differing optically from larderellite, with which it occurs at Laderello, Toscana. Named from the composition.

Anorthite-haüyne. L. H. Borgström, 1930. Zeits. Krist., vol. 74, p. 119 (Anorthithauyn). A hypothetical molecule, $3CaAl_2Si_2O_8.2CaSO_4$, corresponding with haüyne ($3Na_2Al_2Si_2O_8.2CaSO_4$), to explain the composition of the sodalite group. Part of this molecule has the composition of anorthite, hence the name. [M.A. **4**–355.]

Anorthoclase-sanidine. *See* Sanidine-anorthoclase.

Antamokite. A. D. Alvir, 1928. Engin. & Mining Journ. New York, 1928, vol. 125, p. 616; Amer. Min., 1928, vol. 13, p. 491; Philippine Journ. Sci., 1930, vol. 41, p. 137. Telluride of gold with trace of silver, differing from calaverite in its micro-chemical reactions. Named from the locality, Antamok, Mountain Province, Philippine Islands. [M.A. **4**–250.]

Arandisite. F. C. Partridge, 1930. Trans. Geol. Soc. S. Africa, vol. 32 (for 1929), p. 171. T. W. Gevers, ibid., p. 169. Hydrous basic silicate of tin, $3SnSiO_4.2SnO_2.4H_2O$, as apple-green masses with cassiterite and quartz from near Arandis, Swakopmund district, South-West Africa. Named from the locality. [M.A. **4**–248.]

Arsenoklasite. G. Aminoff, 1931. Kungl. Svenska Vetenskapsakad. Handl., ser. 3, vol. 9, no. 5, p. 52 (Arsenoklasite). Basic

arsenate of manganese, $Mn_3(AsO_4)_2.2Mn(OH)_2$, as red orthorhombic cleavages from Långban, Sweden. Named from ἀρσενικόν, orpiment, and κλάσις, breaking. [M.A. **4**–496.]

Arsenomarcasite. W. T. Schaller, 1930. Amer. Min., vol. 15, p. 567. Suggested as a more suitable name for arsenopyrite, the mineral being orthorhombic and not cubic. Synonym of mispickel.

Bayerite. R. Fricke, 1928. Zeits. Anorg. Chem., 1928, vol. 175, p. 252; 1929, vol. 179, p. 287 (Bayerit). G. F. Hüttig and O. Kostelitz, ibid., 1930, vol. 187, p. 4. An artificial form of aluminium hydroxide, $Al(OH)_3$, metastable with respect to gibbsite, obtained in the K. J. Bayer process for the purification of bauxite. [M.A. **4**–30, 169, 305.]

Beryllium-vesuvianite, Be-vesuvianite. C. Palache and L. H. Bauer, 1930. Amer. Min., vol. 15, p. 31; L. H. Bauer, ibid., p. 199. Idocrase from Franklin Furnace, New Jersey, containing BeO 9·20 %. [M.A. **4**–329.]

Bialite. H. Buttgenbach, 1929. Ann. Soc. Géol. Belgique, Publ. Congo Belge, vol. 51 (for 1927–8), p. c 117. Hydrous phosphate of aluminium, magnesium, and calcium, as white orthorhombic needles, from Belgian Congo. Perhaps a magnesian variety of tavistockite. Named after Captain Lucien Bia (1852–1892), a pioneer explorer in Belgian Congo. [M.A. **4**–148.]

Bianchite. C. Andreatta, 1930. Atti (Rend.) R. Accad. Lincei, Cl. Sci. fis. mat. nat. Roma, ser. 6, vol. 11, p. 760. Abstract in Chem. Zentr., 1930, vol. 2, p. 1355, gives the name incorrectly as Biankit. Hydrous double sulphate of zinc and iron, $FeZn_2(SO_4)_3.18H_2O$, as a white crystalline crust (probably monoclinic) from Raibl, Italy (formerly in Carniola). Named after Prof. Angelo Bianchi, of Padova. [M.A. **4**–341.]

Bismutotantalite. E. J. Wayland and L. J. Spencer, 1929. Min. Mag., vol. 22, p. 185. Tantalate (and niobate) of bismuth, $Bi_2O_3.Ta_2O_5$, as black orthorhombic crystals from Uganda. Named from the chemical composition on analogy with stibiotantalite. *See* Ugandite.

Blomstrandinite. A. N. Winchell, 1927. Elements of optical mineralogy, 2nd edit., pt. 2, p. 161. The same as Blomstrandine (of W. C. Brøgger, 1906; 4th List) with a double termination. Not the

Blomstrandite of G. Lindström, 1874, also named after C. W. Blomstrand (1826–97).

Botesite. K. Vrba, 1897. Ottův Slovník Naučný [Otto's Encyclopaedia], Praha, 1897, vol. 11, p. 230. F. Slavík in C. Doelter's Handbuch d. Mineralchemie, 1926, vol. 4, pt. 1, p. 868 (Botesit). Synonym of Hessite. The name was used by K. Vrba on MS. labels in the University mineral collection at Praha in 1882: it is unknown in Hungarian literature. Named from the locality, Mt. Botes, Transylvania.

Buszite. E. Steinwachs, 1929. Centr. Min., Abt. A, 1929, p. 202 (Buszit). From qualitative tests on a small amount of material, apparently a silicate of the rare-earths neodymium, praseodymium, erbium, and europium. A single small ditrigonal bipyramidal crystal, has been found in South-West Africa. Named after Prof. Karl Heinrich Emil Georg Busz [1863–1930], of Münster, Westphalia. [M.A. **4**–149.]

Caesium-beryl. S. L. Penfield, 1888. Amer. Journ. Sci., ser. 3, vol. 36, p. 317 ('the cæsium beryl of Norway, Maine'). A variety of alkali-beryl (q.v.) containing Cs_2O up to 4·56 %, usually as pink crystals of tabular habit. Afterwards named vorobyevite (V. I. Vernadsky, 1908; 5th List) and morganite (G. F. Kunz, 1911; 6th List). Compare also rosterite (F. Zambonini and V. Caglioti, 1928; M.A. **4**–138). [M.A. **1**–76; **3**–448; **4**–96, 315.]

Calciotantalite. E. S. Simpson, 1907. Rep. Australian Assoc. Adv. Sci., vol. 11, p. 452; Amer. Min., 1928, vol. 13, p. 465. A calciferous (CaO 7·78 %) tantalite from Western Australia. [M.A. **4**–184.]

Clarkeite. C. S. Ross, E. P. Henderson, and E. Posnjak, 1931. Amer. Min., vol. 16, pp. 114, 213. Hydrous uranate of sodium and lead, $RO.3UO_3.3H_2O$, dark brown with waxy lustre, forming with gummite a zone of alteration around uraninite from North Carolina. Named after Prof. Frank Wigglesworth Clarke (1847–1931), of Washington, D.C. [M.A. **4**–498.]

Cobaltsmithsonite. G. A. Bilibin, 1927. Mém. Soc. Russ. Min., ser. 2, vol. 56, p. 34 (Кобальтсмитсонит), p. 36 (Cobaltsmithsonite). The cobaltiferous smithsonite (CoO 10·25 %) from Boleo, Lower California, Mexico, analysed by C. H. Warren in 1898.

Collieite. R. Brown, 1927. Trans. Dumfriesshire & Galloway Nat. Hist. Antiq. Soc., ser. 3, vol. 13 (for 1925–26), p. 72. The calcium vanado-pyromorphite from Leadhills, Scotland, analysed in 1889 by Prof. John Norman Collie, F.R.S., of London, after whom it is named. [M.A. **4**–468.]

Cooperite. F. Wartenweiler, 1928. In R. A. Cooper, Journ. Chem. Metall. Mining Soc. South Africa, 1928, vol. 28, p. 283. H. Schneiderhöhn, Centr. Min., Abt. A, 1929, p. 193; Chem. Erde, 1929, vol. 4, pp. 268, 275. P. A. Wagner, The platinum deposits and mines of South Africa, 1929, pp. 12, 18, 226, 237. H. R. Adam, Trans. Geol. Soc. South Africa, 1931, vol. 33 (for 1930), p. 104. Platinum sulphide, PtS_2, as minute pyritohedral-cubic crystals isomorphous with sperrylite, occurring in the platiniferous norite of the Bushveld, Transvaal. Named after R. A. Cooper, of Johannesburg, by whom the mineral was first described (loc. cit., 1928, p. 281). Not the cooperite of —Adam, 1869. Also trade-name for an alloy of nickel, zirconium, tungsten, &c., used for cutting-tools. [M.A. **4**–10, 145, 149, 500.]

Dehrnite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, pp. 303, 324. Hydrous phosphate of calcium and sodium, perhaps $7CaO.Na_2O.2P_2O_5.H_2O$ for soda-dehrnite from Dehrn, Nassau (p. 305), or $14CaO.K_2O.Na_2O.4P_2O_5.2H_2O.CO_2$ from Utah (p. 325), as white crystalline (hexagonal) crusts. Named from the locality. [M.A. **4**–342, 344.]

Deltaite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 321. Hydrous phosphate of calcium and aluminium, $8CaO.5Al_2O_3.4P_2O_5.14H_2O$, as a constituent of variscite nodules from Utah. Named from the Δ-like (trigonal) form of the mineral in intimate intergrowth with pseudowavellite [M.A. **4**–344.]

Dennisonite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 322. Hydrous phosphate of calcium and aluminium, $6CaO.Al_2O_3.2P_2O_5.5H_2O$, as white crusts (hexagonal?) in variscite nodules from Utah. Named after 'J. M. Dennison who first described wardite', i.e. John Mason Davison (1840–1915), of the University of Rochester, New York. [M.A. **4**–344.]

Dickite. C. S. Ross and P. F. Kerr, 1930. Amer. Min., vol. 15, p. 34; Journ. Amer. Ceramic Soc., 1930, vol. 13, p. 151; Prof. Paper U.S. Geol. Survey, 1931, no. 165–E, p. 157. The crystallized

kaolin mineral, $Al_2O_3.2SiO_2.2H_2O$ from Anglesey, distinguished by its optical characters from both kaolinite and nacrite. Named after Allan Brugh Dick (1833–1926), of London, who described the mineral as kaolinite in 1888. [M.A. **4**–247.]

Elbrussite. I. J. Mickey, 1930. Centr. Min., Abt. A, 1930, p. 300 (Elbrussit). Hydrous silicate of aluminium, ferric and ferrous iron, with some magnesia and alkalis, belonging to the nontronite-beidellite group. Named from the locality, Mt. Elbrus (Эльбрус), Caucasus. [M.A. **4**–342.]

Emildine. J. S. van der Lingen, 1928. South African Journ. Sci., vol. 25, pp. 12, 15 (Emildine), p. 13 (Emaldine), p. 14 (Emilite). A spessartine garnet from the granites of South-West Africa, found on spectroscopic analysis to contain yttrium, but no chromium and little or no magnesium (cf. erinadine). Named after the author's son Emil, the *d* in the termination being from false analogy with almandine. [M.A. **4**–83.]

Englishite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 328. Hydrous phosphate of calcium, aluminium, and potassium, $4CaO.K_2O.4Al_2O_3.4P_2O_5.14H_2O$, as thin colourless layers in variscite nodules from Utah; probably orthorhombic, with micaceous cleavage. Named after Mr. George Letchworth English, of Rochester, New York. [M.A. **4**–344.]

Erinadine. J. S. van der Lingen, 1928. South African Journ. Sci., vol. 25, p. 13. A metamorphic garnet from the granite-slate contact in the Cape Peninsula, found on spectroscopic analysis to contain yttrium together with chromium and magnesium (cf. emildine). Named after the author's daughter Erina, the *d* in the termination being from false analogy with almandine. The same author had earlier used the preoccupied name erinite (Erinit: Centr. Min., Abt. A, 1926, p. 182) in the belief that the mineral contained the hypothetical radioactive element 'hibernium'. [M.A. **4**–83, **2**–162.]

Femaghastingsite. M. Billings, 1928. *See* Ferrohastingsite.

Ferrohastingsite. M. Billings, 1928. Amer. Min., vol. 13, p. 287. The original hastingsite, from Hastings Co., Ontario, in which ferrous oxide predominates largely over magnesia. In Magnesiohastingsite

magnesia predominates, and intermediate members of the group are distinguished as Femaghastingsite (p. 292). Other varieties containing more alkalis are distinguished as Alkali-hastingsite, including Alkali-ferrohastingsite and Alkali-femaghastingsite (p. 294). [M.A. **4**–39.]

Ferroschallerite. L. H. Bauer and H. Berman, 1930. Amer. Min., vol. 15, p. 345. A variety of schallerite (10th List) in which the manganese is partly replaced by iron (FeO 17·12 %). [M.A. **4**–345.]

Fersmanite. A. N. Labuntzov, 1929. Compt. Rend. Acad. Sci., URSS, Leningrad, Ser. A, 1929, p. 296 (Ферсманит, fersmanite). Titano-silicate and fluoride of calcium and sodium, $4RTiO_3.2R_2Si(O,F)_2.SiO_2$, as monoclinic crystals resembling sphene from nepheline-syenite in the Kola peninsula. Named after Prof. Aleksandr Evgenievich Fersman (Александр Евгеніевич Ферсман), of Leningrad. [M.A. **4**–246.]

Fervanite. E. P. Henderson and F. L. Hess, 1931. Amer. Min., vol. 16, p. 119. F. L. Hess and E. P. Henderson, ibid., p. 273. Hydrous vanadate of iron, $2Fe_2O_3.2V_2O_5.5H_2O$, as a fibrous (monoclinic?) yellow mineral in sandstone from Colorado and Utah. Named from the composition. [M.A. **4**–498.]

Fülöppite. I. de Finály and S. Koch, 1929. Min. Mag., vol. 22, p. 179; Magyar Tudom. Akad. Mat. Természett. Értesítő, 1929, vol. 46, pp. 663, 673 (fülöppit). Lead sulphantimonite, $2PbS.3Sb_2S_3$, as monoclinic crystals; an acid member of the plagionite-semseyite group. From Nagybánya, Hungary (= Baia Mare, Romania). Named after Dr. B. Fülöpp, a Hungarian mineral collector. [M.A. **4**–244.]

Gordonite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 331. Hydrous phosphate of magnesium and aluminium, $MgO.Al_2O_3.P_2O_5.9H_2O$, as colourless monoclinic crystals in variscite nodules from Utah. Related to paravauxite [$FeO.Al_2O_3.P_2O_5.5H_2O$]. Named after 'Mr. S. L. Gordon who first described paravauxite', i.e. Mr. Samuel George Gordon, of the Academy of Natural Sciences of Philadelphia. [M.A. **4**–344.]

Gudmundite. K. Johansson, 1928. Zeits. Krist., vol. 68, p. 87 (Gudmundit). Sulphantimonide of iron, FeSbS, as orthorhombic crystals isomorphous with and resembling mispickel [FeAsS], from Gudmundstorp, near Sala, Sweden. Named from the locality. [M.A. **4**–12.]

Haematophanite. K. Johansson, 1928. Zeits. Krist., vol. 68, p. 102 (Hämatophanit). Oxychloride of lead and iron, $Pb(Cl,OH)_2$. $4PbO.2Fe_2O_3$, as reddish-brown tetragonal scales, from Jakobsberg, Sweden. Apparently named (from *φαίνεσθαι*, to appear) because of the superficial resemblance to haematite. [M.A. **4**–13.]

Iosene. Brit. Chem. Abstr. A, 1929, p. 1429; and Neues Jahrb. Min. Ref. I, 1930, p. 126 (Iosen); from A. Soltys, Sitzungsber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. II b, 1929, vol. 138 (Supplement), p. 175 = *Monatshefte Chem. Wien*, vol. 53–54, p. 175 (Josen). Error for Josen [10th List], a synonym of hartite. The name Josen was used in manuscript by the late Prof. K. B. Hofmann, of Graz, after his wife Josepha, and was first published by F. Machatschki in 1924. [M.A. **2**–474, **4**–349.]

Kanbaraite. H. Isobe and T. Watanabe, 1930. Bull. Inst. Phys. & Chem. Research, vol. 9, p. 440; Sci. Papers Inst. Phys. & Chem. Research, Tokyo, 1930, vol. 13, Abstracts p. 40. A hexagonal acid clay (Kanbara clay) from Japan with the composition $H_4Al_2MgSi_6O_{18}$. xH_2O is called 'kanbaraite A', and the dehydrated (at 800° C.) cubic form $H_4Al_2MgSi_6O_{18}$ is called 'kanbaraite B'. [M.A. **4**–501.]

Khakassite. G. A. Bilibin, 1926. Zap. Ross. Min. Obshch. (Mém. Soc. Russ. Min.), 1928, ser. 2, vol. 57, p. 307 (Хакассит). This name, which appeared in the title of the paper when read in 1926, was afterwards replaced by Alumohydrocalcite (11th List). Named from the locality, Khakassky district in Siberia.

Kilbreckanite. R. Griffith, Catalogue of the several localities in Ireland where mines or metalliferous indications have hitherto been discovered, 1854, p. 2 (reprinted, Dublin, 1884); G. H. Kinahan, Economic geology of Ireland, Journ. Roy. Geol. Soc. Ireland, 1889, vol. 8, p. 14. Another spelling of Kilbrickenite (J. Apjohn, 1841) from the Monanoe or Kilbreckan lead mine, near Quin, Co. Clare, Ireland. A synonym of Geocronite.

Klebelsbergite. V. Zsivny, 1929. Magyar Tudom. Akad. Mat. Természett. Értesítő, Budapest, vol. 46, p. 19 (Klebelsbergit). Hydrous basic antimony sulphate, as monoclinic needles on stibnite from Felsőbánya, Hungary (= Baia Sprie, Romania). Named after Count Kuno Klebelsberg, Hungarian Minister of Education. [M.A. **4**–150.]

Klinoolivin. E. Dittler, 1929. Sitzungsber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. I, vol. 138, p. 411. A synonym of the monoclinic titanclinohumite. Orthorhombic titanolivine has been prepared artificially, but is not known as a mineral. F. Machatschki, Centr. Min., Abt. A, 1930, p. 200, rightly regards the name as superfluous. [M.A. **4**–309.]

Kramerite. W. T. Schaller, 1930. Prof. Paper U. S. Geol. Survey, no. 158–I, p. 139. The name first appeared, but without description, in Amer. Min., 1928, vol. 13, p. 453. Hydrous borate of sodium and calcium, $Na_2O.2CaO.5B_2O_3.10H_2O$ (i.e. the same as ulexite with $10H_2O$ instead of $16H_2O$), as rosettes of monoclinic prisms in the borate deposits of the Kramer district, Kern Co., California. Named from the locality. Identical with Probertite (q.v.). [M.A. **4**–245.]

Krausite. W. F. Foshag, 1931. Amer. Min., vol. 16, pp. 115, 352. Hydrous sulphate of iron and potassium, $K_2SO_4.Fe_2(SO_4)_3.2H_2O$, as yellowish-green monoclinic crystals from California. Named after Prof. Edward Henry Kraus, of the University of Michigan.

Landesite. H. Berman and F. A. Gonyer, 1930. Amer. Min., vol. 15, p. 384. Hydrous phosphate of ferric oxide and manganous oxide, $3Fe_2O_3.20MnO.8P_2O_5.27H_2O$, as an alteration product of reddingite, from Maine, U.S.A. Named after Prof. Kenneth K. Landes, of the University of Kansas. [M.A. **4**–344.]

Larnite. C. E. Tilley, 1929. Min. Mag., vol. 22, p. 77. Calcium orthosilicate, Ca_2SiO_4, as grains (monoclinic) in a chalk-dolerite contact-rock. Identical with the artificial α-Ca_2SiO_4. Named from the locality, Larne, Co. Antrim, Ireland.

Lausenite. G. M. Butler, 1928. Amer. Min., vol. 13, p. 594. To replace the name Rogersite (C. Lausen, 1928; 11th List) which was preoccupied (J. L. Smith, 1877). Named after Mr. Carl Lausen, of the Arizona Bureau of Mines. [M.A. **4**–12.]

Lehiite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 329. Hydrous phosphate of calcium, aluminium, and alkalis, $5CaO.(Na,K)_2O.4Al_2O_3.4P_2O_5.12H_2O$, as white crusts (monoclinic ?) in variscite nodules from near Lehi, Utah. Named from the locality. [M.A. **4**–344.]

Lessingite. V. A. Zilbermintz, 1929. Compt. Rend. Acad. Sci. URSS, Leningrad, Ser. A, 1929, p. 55 (lessingite, лессингит).

Hydrous silicate of cerium and calcium, $H_2Ca_2Ce_4Si_3O_{15}$, found as cherry-red glassy pebbles in the gold-washings of the Kyshtymsk district, Ural. Named after Prof. Frantz Yulievich Levinson-Lessing (Франц Юліевич Левинсон-Лессинг), of Leningrad. [M.A. **4**–150.]

Lewistonite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 326. Hydrous phosphate of calcium and alkalis, near $15CaO.(K,Na)_2O.4P_2O_5.8H_2O$, as minute hexagonal prisms in variscite nodules from Utah. Named after the locality, Lewiston, Utah. [M.A. **4**–344.]

Liparite. This well-known rock-name was earlier applied to three distinct mineral-species—chrysocolla, fluorite, and talc.

(1) F. Casoria, 1846. Atti della 7ª adunanza degli Scienziati Italiani, Napoli, vol. 7 (for 1845), pt. 2, p. 1156. For a hydrous copper silicate from the island of Lipari the formula was deduced as $2CuO.3SiO_2.4\frac{1}{2}H_2O$, but G. Carobbi, Gazz. Chim. Ital., 1928, vol. 58, p. 801, proves the identity of the mineral with chrysocolla. Named from the locality. [M.A. **4**–139.]

(2) E. F. Glocker 1847. Generum et specierum mineralium synopsis, p. 282 (Liparites, Liparit). Synonym of fluorite. From λιπαρός, splendent.

(3) A. E. Arppe, 1858. Acta Soc. Sci. Fennicae, vol. 5, p. 476 (Jerntalk, Liparit). A ferruginous talc (Fe_2O_3 9·25 %) from Finland. From λιπαρός, oily.

(4) J. Roth, 1861. Die Gesteins-Analysen, p. xxxiv (Liparit). An acid volcanic rock from the Lipari Islands. Synonym of rhyolite of F. von Richthofen, Jahrb. Geol. Reichsanstalt, Wien, 1861, vol. 11 (for 1860), p. 156 (Rhyolith). Named from the locality.

Lithium-amphibole. C. Palache, S. C. Davidson, and E. A. Goranson, 1930. Amer. Min., vol. 15, p. 292. The molecule $Li_2(Mg,Fe)_3Al_2Si_8O_{22}(OH)_2$, or an amphibole containing this in large amount, such as holmquistite or Lithionglaukophan (7th List). [M.A. **4**–526.]

Loseyite. L. H. Bauer and H. Berman, 1929, Amer. Min., vol. 14, pp. 103, 150. Basic carbonate of manganese and zinc, $2RCO_3.5R(OH)_2$, as bluish-white monoclinic needles from Franklin Furnace, New Jersey. Named after Samuel R. Losey (1833 ?–1906 ?), a local collector. [M.A. **4**–151.]

Maghemite. P. A. Wagner, 1927. Econ. Geol., vol. 22, p. 846; Mem. Geol. Survey South Africa, 1928, no. 26, pp. 18, 29. A contraction of magnetite and hematite suggested for magnetic ferric oxide or oxidized magnetite, as distinct from martite. *See* Oxymagnite. [M.A. **4**–215.]

T. L. Walker (Univ. Toronto Studies, Geol. Ser., 1930, no. 29, p. 19) applies this name to a magnetic and anisotropic mineral consisting of mixed sesquioxides of iron and titanium, $(Fe,Ti)_2O_3$, from the Bushveld, Transvaal. [M.A. **4**–348.]

Magnesiohastingsite. M. Billings, 1928. *See* Ferrohastingsite.

Maitlandite. E. S. Simpson, 1930. Journ. Roy. Soc. W. Australia, vol. 16, p. 33. Hydrous silicate of thorium, uranium (UO_2), &c., $2(Pb,Ca)O.3ThO_2.4UO_2.8SiO_2.23H_2O$, differing from mackintoshite (to which the mineral had been provisionally referred in 1912) in containing some lead and calcium. Named after Andrew Gibb Maitland, formerly Government Geologist of Western Australia. [M.A. **4**–346.]

Mangandiaspore. K. Chudoba, 1929. Centr. Min., Abt. A, 1929, p. 11 (Mangandiaspor). A variety of diaspore containing some manganese (Mn_2O_3 4·32 %) from South Africa. [M.A. **4**–148.]

Manganese-pennine. G. Aminoff, 1931. H. Eckermann, Geol. För. Förh. Stockholm, 1927, vol. 49, p. 450 (manganese-chlorite). G. Aminoff, Kungl. Svenska Vetenskapsakad. Handl., 1931, ser. 3, vol. 9, no. 5, p. 13 (manganese-pennine). A variety of pennine containing MnO 1 %, from Långban, Sweden. [M.A. **3**–474; **4**–469.]

Manganilmenite. E. S. Simpson, 1929. Journ. Roy. Soc. W. Australia, vol. 15, p. 103. A variety of ilmenite containing MnO 14·40 %, from Western Australia. [M.A. **4**–315.]

Maufite. F. E. Keep, 1930. Trans. Geol. Soc. S. Africa, vol. 32 (for 1929), p. 103; Bull. Geol. Survey Southern Rhodesia, 1930, no. 16, pp. 26, 33. Hydrous silicate of aluminium, magnesium, and nickel (NiO 4·28 %), $(Mg,Fe,Ni)O.2Al_2O_3.3SiO_2.4H_2O$, forming fibrous emerald-green veins in serpentine from Southern Rhodesia. Named after Herbert Brantwood Maufe, Director of the Geological Survey of Southern Rhodesia. [M.A. **4**–248, 413.]

Metamesolite. A. Cavinato, 1927. Mem. R. Accad. Lincei, Cl. Sci. fis. mat. nat. Roma, ser. 6, vol. 2, p. 339. Artificially dehy-

drated mesolite showing a change in the optical characters. Analogous to the metascolecite, &c., of F. Rinne. [M.A. **4**–321.]

Millisite. E. S. Larsen and E. V. Shannon, 1930. Amer. Min., vol. 15, p. 329. Hydrous phosphate of calcium, sodium, and aluminium, $2CaO.Na_2O.6Al_2O_3.4P_2O_5.17H_2O$, as white crusts (monoclinic?) in variscite nodules from Utah. Named after Mr. F. T. Millis, of Lehi, Utah. [M.A. **4**–344.]

Montasite. (A. L. Hall, Mem. Geol. Survey South Africa, 1930, no. 12 (2nd edit.), pp. 27, 40.) Trade-name for a fine quality fibre asbestos from the Montana mine, Pietersburg, Transvaal; identical with amosite, a variety of anthophyllite.

Mooreite. L. H. Bauer and H. Berman, 1929. Amer. Min., vol. 14, pp. 103, 165. Hydrous basic sulphate of magnesium, zinc, and manganese, $7R(OH)_2.RSO_4.4H_2O$ (for δ-mooreite, $6R(OH)_2.RSO_4.4H_2O$), as tabular monoclinic crystals from New Jersey. Named after Gideon Emmet Moore (1842–1895), mineral chemist of New York City. [M.A. **4**–151.]

Mourmanite. N. N. Gutkova, Dokl. Akad. Nauk SSSR (Compt. Rend. Acad. Sci. URSS), Ser. A, 1930, p. 730 (мурманит, mourmanite). French spelling of murmanite (A. E. Fersman, 1923; 10th List). Hydrated silico-titanate of sodium, &c. Named from the Murman Coast, Russian Lapland.

Nagatelite. S. Iimori, J. Yoshimura, and S. Hata, 1931. Sci. Papers Inst. Physical and Chemical Research, Tokyo, vol. 15, p. 87; Chem. News, London, 1931, vol. 142, p. 211. Hydrous phosphosilicate of cerium earths, aluminium, iron, and calcium, $4R^{II}O.3R^{III}{}_2O_3.6(SiO_2,P_2O_5).2H_2O$, as black monoclinic prisms, belonging to the epidote group and close to allanite. Named from the locality, Nagatejima, Ishikawa, Japan. [M.A. **4**–500.]

Nahcolite. F. A. Bannister, 1928. Nature, London, vol. 122, p. 866; Min. Mag., 1929, vol. 22, p. 60. Sodium bicarbonate, as minute [monoclinic] crystals in a mixture of salts found in a Roman conduit near Naples. Named from the chemical formula $NaHCO_3$ and λίθος, stone.

Nicolayite. E. S. Simpson, 1930. Journ. Roy. Soc. W. Australia, vol. 16, p. 33. Hydrous silicate of thorium, uranium (UO_3), &c.,

$2(Pb,Ca)O.3ThO_2.4UO_3.8SiO_2.21H_2O$, differing from thorogummite (to which the mineral had been provisionally referred in 1912) in containing some lead and calcium. Named after the late Rev. Charles G. Nicolay, who formed the first collection of Western Australian minerals. [M.A. **4**–346.]

Nuolaite. L. Lokka, 1928. Bull. Comm. Géol. Finlande, no. 82, p. 21 (Nuolait). A black mineral resembling wiikite but consisting of an intimate intergrowth of an opaque crystalline material and a colourless isotropic material. The bulk analysis indicates a hydrous meta-niobate (and tantalate) and titanate of yttrium, iron, thorium, &c. Named from the locality, Nuolainniemi, Impilahti parish, Lake Ladoga, Finland. [M.A. **4**–250.]

Oxymagnite. A. N. Winchell, 1931. Amer. Min., vol. 16, p. 270. A contraction of oxidized magnetite, to replace the name maghemite (q.v.) for magnetic ferric oxide. [M.A. **4**–502.]

Potash-margarite. F. C. Phillips, 1931. Min. Mag., vol. 22, p. 485. Synonym of lesleyite, for a margarite in which calcium is largely replaced by potassium.

Probertite. A. S. Eakle, 1929. Amer. Min., vol. 14, p. 427. Hydrous borate of sodium and calcium, '$Na_2CaB_6O_{11}.6H_2O$', as rosettes of monoclinic prisms embedded in kernite from California. Named after Prof. Frank Holman Probert, Dean of the Mining College, University of California. Identical with Kramerite (q.v.). [M.A. **4**–245.]

Pseudo-sarcolite. C. E. Tilley, 1929. Geol. Mag. London, vol. 66, pp. 349, 353 (pseudo-sarcolite), pp. 349, 352 (pseudosarcolite). The artificial product $3(Ca,Na_2)O.Al_2O_3.3SiO_2$, tetragonal and optically negative, prepared by A. F. Buddington (1922), differing from sarcolite in its optical properties. It is regarded as one of the constituent molecules of the minerals of the melilite group. [M.A. **4**–218; Min. Mag. **22**–463.]

Ramdohrite. F. Ahlfeld, 1930. Centr. Min., Abt. A, 1930, p. 365 (Ramdohrit). Sulphantimonite of lead and silver, $Ag_2S.3PbS.3Sb_2S_3$, as grey-black prisms from Bolivia. Named after Prof. Paul Ramdohr, of Aachen. [M.A. **4**–341.]

Rasorite. L. A. Palmer, 1927. Engin. & Mining Journ. New York, vol. 123, p. 494, 1928, vol. 125, p. 207; H. S. Gale, ibid., 1928, vol. 125, p. 702. The Mineral Industry, New York and London, 1927, vol. 35 (for 1926), p. 91. E. H. Kraus and W. F. Hunt, Mineralogy, 2nd edit., 1928, pp. 303, 380. Synonym of kernite (11th List). Named after Mr. Clarence M. Rasor, field engineer to the Pacific Coast Borax Company. [M.A. **4**–244.]

Renardite. A. Schoep, 1928. Bull. Soc. Franç. Min., vol. 51, p. 247 (renardite); Ann. Musée Congo Belge, Ser. I, Minéralogie, Tervueren (Belgique), 1930, vol. 1, fasc. 2, p. 34. Hydrous phosphate of uranium and lead, $PbO.4UO_3.P_2O_5.9H_2O$, as yellow orthorhombic crystals from Katanga. Named after Prof. Alphonse François Renard (1842–1903) of Gand (= Gent). [M.A. **4**–15, 313.]

Sanidine-anorthoclase. K. Chudoba, 1930. Centr. Min., Abt. A, 1930, p. 145 (Sanidinanorthoklas), p. 150 (Sanidin-Anorthoklas, Anorthoklas-Sanidin). Felspar from the Drachenfels, Rhine, with the tabular habit of sanidine but with the optical extinction of anorthoclase. [M.A. **4**–389.]

Scawtite. C. E. Tilley, 1929. Nature, London, vol. 124, p. 896. Min. Mag., 1930, vol. 22, p. 222; 1931, vol. 22, p. 457. Silicate and carbonate of calcium, $6CaO.4SiO_2.3CO_2$ (or perhaps $2CaCO_3.Ca_2Si_3O_8$), as minute monoclinic crystals in vesicles at the contact of chalk and dolerite at Scawt Hill, near Larne in Co. Antrim. Named from the locality.

Schairerite. W. F. Foshag, 1931. Amer. Min., vol. 16, p. 133. Sulphate and fluoride of sodium, $Na_2SO_4.Na(F,Cl)$, as colourless rhombohedral crystals from Searles Lake, California. Named after Dr. John Frank Schairer, of the Geophysical Laboratory, Washington. [M.A. **4**–498.]

Seamanite. E. H. Kraus, W. A. Seaman, and C. B. Slawson, 1930. Amer. Min., vol. 15, p. 220. Hydrous phospho-borate of manganese, $3MnO.(B_2O_3,P_2O_5).3H_2O$, as pale-yellow orthorhombic needles from Michigan. Named after Prof. Arthur E. Seaman, of the Michigan College of Mining and Technology. [M.A. **4**–342.]

Selenolinnaeite. V. Cuvelier, 1929. Natuurwetenschappelijk Tijdschrift, Antwerpen, vol. 11, p. 176 (Selenolinneïet). A seleniferous variety of linnaeite from Katanga. [M.A. **3**–362, **4**–248.]

Serandite. A. Lacroix, 1931. Compt. Rend. Acad. Sci. Paris, vol. 192, pp. 189, 193, 1324 (sérandite). Acid metasilicate of manganese, calcium, and sodium, $(Mn,Ca)_{7\cdot5}Na_3H_2(SiO_3)_{10}$, as peach-blossom-red monoclinic crystals in sodalite-syenite from the Los Islands, West Africa. Named after Mr. J. M. Sérand, a local collector. [M.A. **4**–497.]

Silicoilmenite. P. P. Pilipenko, 1930. Mineralnoe Syre, Moskva, 1930, vol. 5, p. 981 (Силикоильменит). A red-brown mineral intergrown with ilmenite from the Ilmen Mts., Ural, thought to represent a solid solution of silicate or silica in ilmenite. [M.A. **4**–499.]

Soda-dehrnite. E. S. Larsen and E. V. Shannon, 1930. *See* Dehrnite.

Soda-margarite. F. C. Phillips, 1931. Min. Mag., vol. 22, pp. 482, 485. Synonym of ephesite, for a margarite in which calcium is largely replaced by sodium.

Soda-melilite. H. Berman, 1929. Amer. Min., vol. 14, p. 398 (soda-melilite), pp. 400, 405 (soda melilite). A hypothetical molecule $Na_2Si_3O_7$ which is regarded as an end-member of the melilite group. Similarly, sub-melilite is $CaSi_3O_7$. [M.A. **4**–204.]

Stainierite. V. Cuvelier, 1929. Natuurwetenschappelijk Tijdschrift, Antwerpen, vol. 11, p. 177 (Stainieriet). A. Schoep and V. Cuvelier, Bull. Soc. Belge Géol. Pal. Hydrol., 1930, vol. 39 (for 1929), p. 74. W. F. de Jong, Natuurwet. Tijds., 1930, vol. 12, p. 69. A. Schoep, Ann. Service Mines, Katanga, 1930, vol. 1, p. 55. Hydrous sesquioxide of cobalt with some iron and aluminium, $(Co,Fe,Al)_2O_3.H_2O$, regarded as the crystalline equivalent of the colloidal heterogenite. From Katanga, Belgian Congo. Named after Xavier Stainier, Professor of Geology in the University of Gent (= Gand). [M.A. **4**–248, 347, 501.]

Stibiopalladinite. P. A. Wagner, 1929. The platinum deposits and mines of South Africa, Edinburgh & London, 1929, pp. 12, 15, 18, 227, 237. H. Schneiderhöhn, Centr. Min., Abt. A, 1929, p. 193; Chem. Erde, 1929, vol. 4, pp. 268, 275. Palladium antimonide, Pd_3Sb, as minute white grains (cubic ?) in the platiniferous norite of the Bushveld, Transvaal. First described as 'a new palladium mineral' by H. R. Adam, Journ. Chem. Metall. Mining Soc. South

Africa, 1927, vol. 27, p. 249, and later named from the chemical composition. [M.A. **3**–369; **4**–145, 149.]

Sturtite. T. Hodge-Smith, 1930. Rec. Australian Museum, vol. 17, p. 410. Hydrous silicate of manganous oxide and ferric oxide, $H_3FeMn_3Si_4O_{14}.10H_2O$, as amorphous jet-black masses from Broken Hill, New South Wales. Named after Captain Charles Sturt (1795–1869), who visited the locality in 1844. [M.A. **4**–345.]

Sub-melilite. H. Berman, 1929. *See* Soda-melilite.

Takizolite. S. Iimori and J. Yoshimura, 1929. Bull. Chem. Soc. Japan, vol. 4, p. 2; Sci. Papers Inst. Physical & Chemical Research, Tokyo, vol. 10, p. 225. A pink clay from Tanokami, Japan, intermediate in composition, $2Al_2O_3.7SiO_2.7H_2O$, between catlinite and montmorillonite. Named after the late Takizo Ueno, of Tanokami, who collected the material. [M.A. **4**–247.]

Tanteuxenite. E. S. Simpson, 1928. Journ. Roy. Soc. Western Australia, vol. 14, p. 45; Amer. Min., 1928, vol. 13, p. 467. Titanotantalate of yttrium, &c., $YtTi_2TaO_8$, differing from euxenite in containing tantalum in place of niobium; as tabular orthorhombic crystals from Western Australia. [M.A. **4**–9, 184.]

Teepleite. (C. Doelter, Handbuch d. Mineralchemie, 1927, vol. 4, pt. 2, p. 663; Teepleit). Synonym of burkeite and gauslinite (11th List), described by J. E. Teeple in 1921.

Thucholite. H. V. Ellsworth, 1928 (see 11th List). Amer. Min., vol. 13, pp. 419, 438 (thū′-chō-lite). H. S. Spence, Amer. Min., 1930, vol. 15, p. 499. A. Faessler, Centr. Min., Abt. A, 1931, p. 10 (Thucholith). A brittle jet-black carbonaceous material with variable amount of ash which contains thorium, uranium, &c. It occurs as small nodules intimately associated with uraninite in pegmatite in Canada. Named from the chemical symbols of its chief components, Th, U, C, H, O, and λίθος, stone. [M.A. **4**–11, 502.]

Tsilaisite. W. Kunitz, 1929. Chemie der Erde, vol. 4, p. 225 (Tsilaisit). A hypothetical molecule, $H_8Na_2Mn_6Al_{12}Si_{12}B_6O_{62}$, of the tourmaline group, to explain the composition of a manganiferous tourmaline (MnO about 6 %) from Tsilaisina (Tsilaizina), Madagascar. Named from the locality. [M.A. **4**–204.]

Ugandite. E. J. Wayland and L. J. Spencer, 1929. Min. Mag., vol. 22, pp. 186, 187. Synonym of bismutotantalite, from Uganda.

Uvite. W. Kunitz, 1929. Chemie der Erde, vol. 4, p. 221 (Uvit). A hypothetical molecule, $H_8Ca_2Mg_8Al_{10}Si_{12}B_6O_{62}$, of the tourmaline group, to explain the composition of magnesia-lime-tourmaline (CaO 5·35 %) from province Uva, Ceylon. Named from the locality. [M.A. **4**–204.]

Vanadine. — Adam, 1869. Ann. Mines, Paris, ser. 6, Mém. vol. 15, p. 488; Tableau Minéralogique, Paris, 1869, p. 33. Synonym of vanadic ochre (J. D. Dana, 1868) = vanadic acid (J. E. Teschemacher, 1851). The existence of this as a mineral has been questioned by W. T. Schaller, Amer. Journ. Sci., 1915, ser. 4, vol. 39, p. 404 [M.A. **1**–262]. Cf. Alaite, 5th List.

Wischnewite. D. S. Belyankin, 1931. Centr. Min., Abt. A, 1931, p. 196 (Wischnewit). To replace the name sulphate-cancrinite or sulphatic cancrinite (E. S. Larsen and G. Steiger, 1916; 8th List) for $3Na_2Al_2Si_2O_8.Na_2SO_4.3H_2O$, of the davyne-cancrinite group. Named from the locality, Wischnewy Gory [Vishnevy Mts.], southern Ural. [M.A. **4**–499.]

Zamboninite. F. Stella Starrabba, 1930. Boll. Soc. Geol. Italiana, vol. 48 (for 1929), p. 259. Fluoride of magnesium and calcium. $CaF_2.2MgF_2$, as white radially fibrous masses from Etna, Sicily. Named after Professor Ferruccio Zambonini, of Napoli. The alternative name zambonina (= zambonine) is mentioned, but not adopted. Not the zamboninite of M. Bauer (1901, 6th List). [M.A. **4**–249.]

Zinc-manganese-cummingtonite. L. H. Bauer and H. Berman, 1930. Amer. Min., vol. 15, p. 341. An amphibole containing ZnO 10·46, MnO 13·79 %, as green prisms from Franklin Furnace, New Jersey. [M.A. **4**–345.]

Zirklerite. E. Harbort, 1928. Kali, Halle, vol. 22, p. 157 (Zirklerit). Hydrous chloride of ferrous iron, magnesium, and calcium with aluminium hydroxide, $9\{(Fe,Mg,Ca)Cl_2.2H_2O\} + 2\{Al_2O_3.H_2O\}$, rhombohedral; from the north German potash-salt deposits. Named after Bergrat Dr. — Zirkler, Director of the Aschersleben potash works. [M.A. **4**–14.]

SYSTEMATIC CLASSIFICATION OF NEW MINERALS.[1]

SULPHIDES, &c.

Stibiopalladinite, Pd_3Sb.
Cooperite, PtS_2.
Gudmundite, FeSbS.
Antamokite, Au telluride.
Selenolinnaeite, var. of linnaeite.

SULPHO-SALTS.

Fülöppite, $2PbS.3Sb_2S_3$.
Ramdohrite, $Ag_2S.3PbS.3Sb_2S_3$.

HALOIDS.

Zamboninite, $CaF_2.2MgF_2$.
Haematophanite, $Pb(Cl,OH)_2.4PbO.2Fe_2O_3$.
Zirklerite, $9\{(Fe,Mg,Ca)Cl_2.2H_2O\} + 2\{Al_2O_3.H_2O\}$.

OXIDES.

Maghemite, magnetic $(Fe,Ti)_2O_3$.
Manganilmenite, var. of ilmenite.

HYDROXIDES.

Bayerite, $Al(OH)_3$.
Mangandiaspore, var. of diaspore.
Stainierite, $(Co,Fe,Al)_2O_3.H_2O$.

CARBONATES.

Nahcolite, $NaHCO_3$.
Cobaltsmithsonite, $(Zn,Co)CO_3$.
Loseyite, $2(Mn,Zn)CO_3.5(Mn,Zn)(OH)_2$.

SULPHATES.

Schairerite, $Na_2SO_4.Na(F,Cl)$.
Krausite, $K_2SO_4.Fe_2(SO_4)_3.2H_2O$.
Klebelsbergite, basic sulph. Sb.
Bianchite, $FeZn_2(SO_4)_3.18H_2O$.
Mooreite, $7R(OH)_2.RSO_4.4H_2O$; [R = Mg,Zn,Mn].

URANATE.

Clarkeite, $(Na_2,Pb)O.3UO_3.3H_2O$.

BORATES.

Ammonioborite, $(NH_4)_2O.5B_2O_3.5H_2O$.
Probertite, $NaCaB_5O_9.5H_2O$.
Seamanite, $3MnO.(B_2O_3,P_2O_5).3H_2O$.

PHOSPHATES, ARSENATES, &c.

Collieite, Ca -V- pyromorphite.
Bialite, hyd. phosp. Al,Mg,Ca.
Arsenoklasite, $Mn_3(AsO_4)_2.2Mn(OH)_2$.
Fervanite, $2Fe_2O_3.2V_2O_5.5H_2O$.
Renardite, $PbO.4UO_3.P_2O_5.9H_2O$.
Dehrnite, $7CaO.Na_2O.2P_2O_5.H_2O$.
Deltaite, $8CaO.5Al_2O_3.4P_2O_5.14H_2O$.
Dennisonite, $6CaO.Al_2O_3.2P_2O_5.5H_2O$.
Lewistonite, $15CaO.(K,Na)_2O.4P_2O_5.8H_2O$.
Englishite, $4CaO.K_2O.4Al_2O_3.4P_2O_5.14H_2O$.
Millisite, $2CaO.Na_2O.6Al_2O_3.4P_2O_5.17H_2O$.
Lehiite, $5CaO.(Na,K)_2O.4Al_2O_3.4P_2O_5.12H_2O$.
Gordonite, $MgO.Al_2O_3.P_2O_5.9H_2O$.
Landesite, $3Fe_2O_3.20MnO.8P_2O_5.27H_2O$.

SILICO-ARSENITE.

Allodelphite, $5MnO.2Mn_2O_3.As_2O_3.SiO_2.5H_2O$.

NIOBATES, TANTALATES.

Bismutotantalite, $BiTaO_4$.
Calciotantalite, var. of tantalite.
Tanteuxenite, $YtTi_2TaO_8$.
Nuolaite.

SILICATES.

Achromaite, var. of hornblende.
Alkali-hastingsite, ,,
Ferrohastingsite, ,,
Magnesiohastingsite, ,,
Lithium-amphibole, ,,
Zn-Mn-cummingtonite, ,,

[1] Only a selection of the names given in the preceding alphabetical list is here included.

Alkali-beryl, var. of beryl.
Caesium-beryl, ,,
Beryllium-vesuvianite.
Buszite, sil. rare-earths.
Lessingite, $H_2Ca_2Ce_4Si_3O_{15}$.
Larnite, Ca_2SiO_4.
Scawtite, $6CaO.4SiO_2.3CO_2$.
Nagatelite,
$4R^{II}O.3R^{III}{}_2O_3.6(SiO_2,P_2O_5).2H_2O$;
$[R^{II} = Fe,Ca\,;\ R^{III} = Al,Ce,La,Yt]$.
Arandisite, $3SnSiO_4.2SnO_2.4H_2O$.
Serandite, $(Mn,Ca)_{7\frac{1}{2}}Na_3H_2(SiO_3)_{10}$.
Ameletite,
$9Na_2O.6Al_2O_3.12SiO_2.\frac{1}{2}NaCl$.
Fersmanite, $4(Ca,Na_2)TiO_3$.
$2(Ca,Na_2)_2Si(O,F)_3.SiO_2$.
Murmanite, hyd. sil. tit. Na.
Dickite, $Al_2O_3.2SiO_2.2H_2O$.
Takizolite, $2Al_2O_3.7SiO_2.7H_2O$.
Kanbaraite, $H_4Al_2MgSi_6O_{18}.xH_2O$.
Elbrussite, hyd. sil. Al,Fe,Mg,Alk.
Maufite,
$(Mg,Fe,Ni)O.2Al_2O_3.3SiO_2.4H_2O$.
Sturtite, $H_3FeMn_3Si_4O_{14}.10H_2O$.
Maitlandite,
$2(Pb,Ca)O.3ThO_2.4UO_2.8SiO_2.23H_2O$.
Nicolayite,
$2(Pb,Ca)O.3ThO_2.4UO_3.8SiO_2.21H_2O$.
Wischnewite,
$3Na_2Al_2Si_2O_8.Na_2SO_4.3H_2O$.

HYDROCARBONS.

Almashite, var. of amber.
Thucholite.